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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,440	07/13/2001	Naoki Watanabe	36992.00081	5821
7590 12/16/2004				
ARNOLD M. DE GUZMAN		EXAMINER		
SQUIRE, SANDERS & DEMPSEY LLP		TRAN, NGHI V		
600 Hansen Way		ART UNIT		
Palo Alto, CA 94304		PAPER NUMBER		
		2151		

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/905,440

Applicant(s)

WATANABE ET AL.

Examiner

Nghi V Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on October 14, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 10-19 and 21-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/14/02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claim 20 of Group II in the reply filed on October 14, 2004 is acknowledged. The traversal is on the ground(s) that Group I, claims 1-9, is directed to process of performing an initial copy procedure by adjusting or configuring the speed of data transmission across the network path and Group II, claims 10-23, is directed to process of performing an initial copy procedure by performing a split procedure in the first disk subsystem at the first site. According to Applicants, claim 20 of Group II is directed to "a remote copy system" having a "network path capable to be configured to increase or decrease the speed of data transmission." Therefore, Examiner rejoins only claim 20 of Group II with claims 1-9 as part of Group I.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 10-19 and 21-23 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on October 14, 2004.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wahl et al., U.S. Patent Number 6324,654 (hereinafter Wahl) in view of Paul A. Bottorff, "Parallel path trunking" (hereinafter Paul).

Taking claim 1 as an exemplary claim, Wahl fails to teach adjusting the network path to reduce the speed of data transmission across the network path. However, Wahl clearly teaches a method of performing an initial copy procedure in a remote copy system, the method comprising:

- configuring a network path between a first disk subsystem and a second disk subsystem to increase the speed of data transmission across the network path (column 25, lines 1-10; and figure 1);
- configuring the remote copy system for a remote copy operation (figure 1; and see abstract); and
- performing an initial copy operation to copy data across the network path from the first disk subsystem to the second disk subsystem (column 4, lines 14-33).

In performing a copy method, Paul discloses adjusting the network path to reduce the speed of data transmission across the network path (page 11). It would have been obvious to one having ordinary skill in the art at the time of the invention was

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made to modify Wahl in view of Paul by adjusting the network path to reduce the speed of data transmission across the network path. The motivation for doing so would have been obvious because reducibility or deletion of physical links from the logical link increases security.

With respect to claim 2, Wahl further teaches the first disk subsystem is located in a master site (figure 1).

With respect to claim 3, Wahl further teaches the first disk subsystem is located in a manufacturer site (figure 1).

With respect to claim 4, Wahl further teaches deploying the second disk subsystem to a remote site (figure 1).

With respect to claim 5, Wahl further teaches the configuring the remote copy system comprises: selecting multiple physical paths in the network path to transmit data across the path (column 24, line 44 through column 24, line 10).

With respect to claim 6, Wahl further teaches the configuring the remote copy system comprises: increasing a data transfer rate characteristic of the network path (column 3, lines 39-44).

With respect to claim 7, Wahl fails to teach reducing the number of physical paths. In performing a copy method, Paul discloses adjusting the network path comprises: reducing the number of physical paths in the network path for transmitting data (page 11).

With respect to claim 8, Wahl fails to teach decreasing the data transfer rate. In performing a copy method, Paul discloses adjusting the network path comprises: decreasing the data transfer rate characteristic of the network path (page 11).

Claims 9 and 20 are also rejected for the same reason set forth in claim 1 above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. "Real-time data protection system and method," by Galipeau et al., U.S. Patent Number 6,308,283.
- b. "Operation of a standby server to preserve data stored by a network server," by Winger et al., U.S. Patent Number 6,50,617.
- c. "Automatic stand alone recovery for peer to peer remote copy (PPRC) operations," by Milillo et al., U.S. Patent Number 6,499,112.
- d. "Performing acknowledge operations on original and mirrored copies of data," by Ohran et al., U.S. Patent Number 6,526,487.
- e. "Method and apparatus for maximizing distance of data mirrors," by Weinman, JR., U.S. Patent Application Publication Number 2001/0047412.
- f. "Multiple writing volume backup method," by Shinmura et al., U.S. Patent Number 5,724,500.
- g. "Method and apparatus for load apportionment among physical interfaces in data routers," by Skirmont et al., U.S. Patent Number 6,553,005.

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h. "Data mirroring method and information processing system for mirroring data," by Yanaka, U.S. Patent Number 6,467,034.


i. "Storing and retrieving data on tape backup system located at remote storage system site," by West et al., U.S. Patent Number 6,446,175.

j. "Method and system for transferring data between primary storage and secondary storage using a bridge volume and internal snapshot copy of the data being transferred," by West et al., U.S. Patent Number 6,446,176.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ZARNI MAUNG
PRIMARY EXAMINER

Nghi V Tran
Examiner
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